

**ONE DOLLAR PER YEAR.**

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**THOMAS G. NEWMAN,** } **EDITORS.**  
**GEORGE W. YORK,** }

**Vol. XXIX. June 16, 1892. No. 25.**

## Editorial Buzzings.

**When June is Here,** what art have we to sing  
 The whiteness of the lilies 'midst the green  
 Of moon-washed walls; or flash of roses seen  
 Like redbirds' wings; or pippings ripening  
 In matted foliage where the cloyed bees cling  
 Round winey juices oozing down between  
 The peckings of the robin, while we lean  
 In languor sweet past wit of uttering;  
 Or the cool term of morning, and the stir  
 Of odorous breaths from grassy meadow-walks  
 The bobwhite's liquid yodel, and the whir  
 Of sudden flight, and, where the milkmaid talks  
 Across the bars, on tilted barley-stalks  
 The dewdrops' glint in webs of gossamer?

—JAMES WHITCOMB RILEY.

**Father Langstroth's** article on page 797 of this number of the BEE JOURNAL will be read with much interest by thousands of his admiring friends. It has been a long time since he has been able to contribute an article for publication, and now that he is once more permitted to do so, we may expect some-

thing further from his beneficent pen. The article referred to here, will prove of great benefit to those who, though greatly liking honey, have not been able to partake of it as freely as they might wish. Good milk, butter and honey are three of the choicest of man's blessings. No person should be deprived of enjoying the health-giving qualities of the third, when either of the other two—milk and butter—will prevent any of its occasional unpleasant effects.

**Expressions** of regret for the former, mingled with "good wishes" for the present, management of the AMERICAN BEE JOURNAL are being received from many of the hosts of admirers of the "Old Reliable." We are deeply grateful for these expressions of good-will and encouragement. Prof. A. J. Cook, of Agricultural College, Mich.—that prince among American beekeepers—wrote the senior editor as follows, on June 6, 1892:

I am very sorry that you are forced, on account of ill-health, from your excellent work as editor of the "Old Reliable." We shall all miss you very much—your excellent counsel, your safe and wise judgment, your persistent efforts to keep all that is best, and to down all that is bad. We shall not utterly lose all, for you cannot, if you would, entirely withdraw from the work. We are all glad that the AMERICAN BEE JOURNAL goes into such able hands. We shall all wish for you the best fruits of the long-needed rest. I shall ever be a friend of the AMERICAN BEE JOURNAL.

A. J. COOK.

**Visitors** to the Exposition will be able to go comfortably and expeditiously from one part of the grounds to another and obtain advantageous views of the buildings. They may do this either in electric boats through the lagoons, or by the intramural elevated electric railway. There will be five miles of double track and stations at convenient points. The route, as mapped out, runs from one end to the other of the grounds in a sinuous course. The fare will be 5 cents, and the capacity of the road about 20,000 an hour.

**A Rich Honey Harvest** may yet result before the season is over. It is said that late seasons are usually better than early ones, as they are much longer, extending far into the fall of the year. If such should be the case this year, all may yet be well for those who succeed in getting their bees through the unfavorable spring and early summer. The *American Bee-Keeper* for June has the following very encouraging words to offer about the apicultural prospects:

"This certainly ought to be an unusually good honey season, as the long-continued rains will make a serious drouth almost impossible; and we have always noticed that when there has been a severe winter or spring resulting in a heavy loss of bees, there was invariably an abundance of nectar. Those who have carried their bees through successfully this spring, will doubtless reap a rich harvest."

**Score Another Point** in favor of the National Bee-Keepers' Union. Its moral influence is even more important than its financial support. The strength of a body corporate is wonderful when it is exerted in defending a righteous cause.

Some time ago, J. H. Andre, of Lockwood, N. Y., when sending to the General Manager his fee for membership for the present year in the Bee-Keepers' Union, wrote: "I may not keep bees but a short time, but I shall feel more safe if I am backed by the Union." Mr. Andre is in poor health, and is hardly able to do the work in the apiary, and that is what he means by saying that he "may not keep bees but a short time."

Subsequent to this, a disagreeable neighbor threatened to sue him for damages, said to be done by his bees. Mr. Andre sent for some copies of "the decision of the Supreme Court of Arkansas," and circulated them around his neighborhood. The result was magical, and he writes thus: "When they found that I belonged to the National Bee-

Keepers' Union, they wanted nothing more to do with the matter."

This is but one of the many proofs of the advantages to be derived from a membership in the Bee-Keepers' Union. Truly, "In union there is strength." The Bee-Keepers' Union is a veritable "stronghold for defense," is worthy of the esteem of every apiarist, and should have a hundred thousand members.

**Thin Comb Foundation** samples have been received from Mr. C. W. Dayton, who is now at Greeley, Colo. The foundation was made on a Vander-vort mill, and are very fine indeed. One sample runs 14½ square feet to the pound, and the other 13 1-7 square feet. Mr. D. thinks that with extra care in dipping the sheets, it can be made 16½ square feet to the pound. Mr. Dayton contributes an interesting article to this number of the BEE JOURNAL, on "Bee-Keeping in Colorado, Iowa and Wisconsin." Read it.

**A German Bee-Keeper** says: "I have business relations with some 73 societies, and have become personally acquainted with more than 3,000 bee-keepers. Among the 3,000, I do not know of one drinker." What a splendid record for sobriety and good habits! We often wonder whether as much could be said of American bee-keepers. We hope so, but somehow we can almost hear a good many say, "I don't know," about that. We believe most emphatically that there is not another class of persons in existence that can show any more honest, industrious and sober men in its ranks than the industry of bee-keeping.

**Circulars** have been received at this office from the following:—

Leininger Bros., Fort Jennings, O.—Italian Queens.

J. P. Moore, Morgan, Ky.—Italian Queens and Bees.

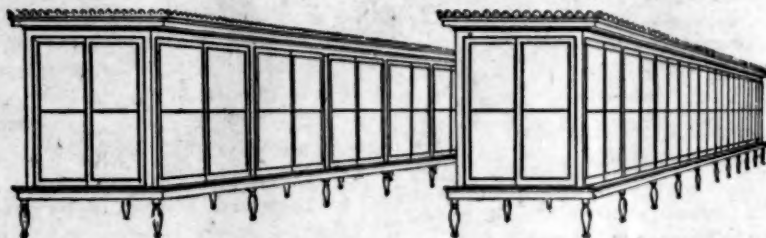
N. A. Knapp, Rochester, O.—Bees, Queens, Chickens and Ferrets.

**The Apiarian Exhibit** to be made at the World's Fair next year was written about by Dr. Mason, on page 760, of last week's BEE JOURNAL. Reference was therein made to something that Mr. W. I. Buchanan, Chief of the Agricultural Department, would publish soon, regarding the bee and honey exhibit. Below we give the special rules, and also an illustration of the proposed glass cases in which the exhibit will be made. We commend what Mr. Buchanan has to say, to the attention of our readers, and trust that they may now begin to prepare for one of the grandest apiarian shows that the world has ever seen. Here are the "Special rules and information governing the exhibit of

f. Name of plant from which honey was produced.  
g. Yield per colony.  
h. Average price of product at nearest home market.

5. In order to secure a uniform, handsome and economical installation of honey and beeswax, the Exposition will erect suitable glass cases, of a uniform character, in which such exhibits will be made; the cost of these cases to be borne by the different State Commissions, Bee-Keepers' Associations, or by individual exhibitors, in proportion to the number of lineal feet occupied. These cases will become the property of such exhibitors at the close of the Exposition. Below is a very good illustration of the proposed cases.

6. Individual exhibits of comb honey will be limited to 100 pounds, and may be made in any manner the exhibitor may desire, subject to the approval of the Chief of the Department.



The dimensions are as follows: Height of base, 18 inches; width of case, 5 feet; height of case above base (inside measure), 6 feet; total height, 8 feet. It has sliding doors on both sides.

#### Bees, Honey, Beeswax and Bee-Appliances:"

1. Exhibits of honey will be classified as follows:

- Class 1. Clover and Basswood.
- Class 2. White sage.
- Class 3. Buckwheat.
- Class 4. All light honey, other than enumerated in Classes 1 and 2.
- Class 5. All dark honey, other than enumerated in Class 3.

2. Exhibits of honey produced during 1892, or earlier, must be in place on or before April 20, 1893.

3. Exhibits of honey in Classes 1, 2, and 4, produced during 1893, will be received between July 15 and Aug. 15; and in Classes 3 and 5 between Aug. 15 and Sept. 1, 1893.

4. The following information should accompany each exhibit.

- a. Kind of honey.
- b. Name of exhibitor.
- c. Place where produced.
- d. Character of soil in locality where produced.
- e. Variety of bee.

7. Individual exhibits of extracted honey must be made in glass, and must not exceed 50 pounds.

8. Individual exhibits of beeswax must not exceed 50 pounds, and should be prepared in such a manner as will add to the attractiveness of the exhibit.

9. Exhibits of primitive and modern appliances used in bee-culture, both in this country and abroad, will be received subject to the approval of the Chief of the Department.

10. Special arrangements will be made by the Chief of the Department for a limited exhibit of bees.

11. Collections of honey-producing plants, suitably mounted and labeled, will be accepted if satisfactory to the Chief of the Department.

12. The right is reserved to add to, amend or interpret the above rules.

Signed, W. I. BUCHANAN,  
Chief, Dept. of Ag'l.

Approved, GEO. R. DAVIS,  
Director General.



**The Premium List on Bees and Honey**, as offered by the State Fair to be held at Lincoln, Nebr., on Sept. 2 to 9, 1892, is as follows:

**LOT 1.—Bees and Honey.**

**POINTS FOR THE JUDGMENT OF HONEY.**

**COMB HONEY.**—1. Perfection of capping. 2. Evenness of surface. 3. Whiteness of capping. 4. General appearance as to marketability.

**EXTRACTED HONEY.**—1. Cleanliness. 2. Clearness. 3. Flavor.

Best comb basswood or white clover honey, not less than 20 pounds, crated and in single-comb sections weighing not more than 2 pounds each—1st premium, \$10; 2d premium, \$5.00.

Best comb fall honey not less than 20 pounds, crated and in single-comb sections weighing not less than 2 pounds each—1st, \$10.00; 2d, \$5.00.

Best gallon of extracted white clover or basswood honey—1st, \$5.00; 2d, \$3.00.

Best gallon of extracted fall honey—1st, \$5.00; 2d, \$3.00.

The above is limited to competitors producing their own honey in Nebraska during the year 1892.

Best 20 pounds of granulated honey—1st, \$5.00; 2d, \$3.00.

Best and largest display of any one, including bees, extracted comb honey, and aparian supplies—1st, \$15.00; 2d, \$10.00.

Best exhibit of brood-chamber and surplus comb foundation, full to partly drawn—1st, \$10.00; 2d, \$5.00.

Best exhibit of aparian supplies and implements—1st, \$15.00; 2d, \$10.00.

Best display of honey in marketable shape—1st, \$10.00; 2d, \$5.00.

Best display of honey candy, honey sugar, and sweets by any one, in which honey is made to fill the place of sugar—1st, \$5.00; 2d, \$3.00.

Best honey vinegar, not less than one-half gallon—1st, \$3.00; 2d, \$2.00.

Best display of bees and queens in observatory hives, and not allowed to fly—1st, \$10.00; 2d, \$5.00.

Best exhibition of extracting honey, to be exhibited on the grounds under the direction of the Superintendent, not later than Thursday of the Fair—1st, \$10.00; 2d, \$5.00.

Best honey extractor, test to be made by actual extracting upon the grounds—1st, \$5.00; 2d, \$3.00.

Best all-purpose single-walled hive—1st, \$2.00; 2d, \$1.00.

Best all-purpose chaff hive—1st, \$2.00; 2d, \$1.00.

Best bee-smoker—1st, \$1.00; 2d, 50 cents.

The following is confined to exhibitors in Nebraska alone:

Best display of aparian implements and supplies, including comb foundation, same full to partly drawn, and queens and bees in cages—1st, \$10.00; 2d, \$5.00.

Best report of surplus honey, stored by any colony of bees during the year 1891, the amount of stores, manner of building up, handling, kind of hive used, and kind and quality of stores, to be verified by owner, entries to conform with other entries of this class, and report with verification to be filed with the Superintendent not later than noon on Thursday of the Fair—1st, \$15.00; 2d, \$10.00; 3d, \$5.00.

**LOT 2.—Discretionary.**

This lot is intended for any and all articles which may have been omitted in any of the foregoing lots in this class, and might properly have been included therein.

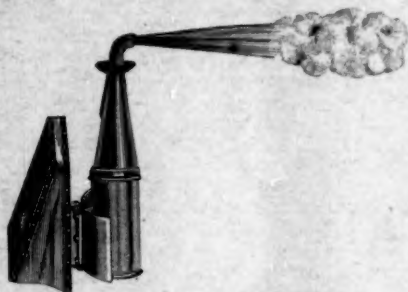
**Our Thanks** are due the *American Bee-Keeper* for the following paragraph of pleasant references:

"It is with much regret that we note that Messrs. Thomas G. Newman & Son have sold the *AMERICAN BEE JOURNAL*. Brother Newman has been its editor for many years, and has conducted it in a manner commendable throughout. His continued ill-health has compelled him to take this step. Messrs. George W. York & Co. will continue the publication of the *AMERICAN BEE JOURNAL*, and will doubtless do so in a manner pleasing to all its readers. Mr. York has been assistant editor for some time past, and so the editorial mantle falls gracefully on his shoulders."

**The Globe Bee-Veil**, which we offer on the third page of this number of the *BEE JOURNAL*, is just the thing. You can get it for sending us only three new subscribers, with \$3.00.

**The Bingham Bee-Smoker,** as recently improved, and described on page 601, we show to our readers in the engraving below. It represents one of the modern advances in the perfecting of apiarian appliances, and Mr. Bingham deserves the thanks of all progressive apiarists for his efforts to aid in facilitating the management of bees. In a letter to us he says:

"I have a letter from Mr. O. J. Hetherington, in which he says, 'It is just



*Bingham Perfect Safety Bee-Smoker.*

the thing.' It is so handy, and is just what every bee-keeper will appreciate. It is so nice to be able to send the smoke where you want it, without turning the smoker upside down. Mr. H. says it will be so nice for handling sections, as the door or nozzle handles so nicely. I think the smoker is now perfect, and the weaknesses it had are now overcome; hence, I call it the "Perfect Safety Smoker."

**Keep Your Feet Dry,** is very good advice, and should be heeded. Many are the complaints that are caused originally by wet feet. The following is recommended as a very good preparation to render the leather of your boots or shoes waterproof, thus better protecting the feet:

"Take two parts of linseed oil, one part of mutton tallow, and one part of beeswax. Melt and mix thoroughly together. Dry and warm the leather, and apply the mixture with a brush. It makes your understandings perfectly waterproof."

**Best Honey Crop for Years,** is what some bee-keepers expect this year. Mr. C. H. Dibbern, in the *Western Plowman*, says this about the "dark cloud" that worried bee-keepers the past few weeks:

But happily there is a "silver lining" to this cloud of general despair. Rains and cold weather have brought out the white clover in the best possible condition. With fairly good weather during the next six weeks, we will in all probability secure the best honey crop we have had in three years. Two years ago our bees were in fine shape, in a good trim for the harvest, but as there was no honey in the blossoms, what did it all amount to? We will now have less bees to look after, and can take better care of what remains. If we produce a fair crop of honey, it will likely be of a fine quality, and should find a good market and fair price.

**The Scotch** people are pretty hard to get ahead of in many things, and the following is but a fair sample of the proof that they are not far behind some other people who are noted for "tricks that are vain:" "A speculative Scotch gentleman wanted to dispose of some bees; so, to attract purchasers, he printed the following placard: 'Extensive sale of live stock, comprising no less than 140,000 head, with an unlimited right of pasturage.'" The ingenious trick succeeded to admiration, for his 'stock' brought high prices.

**The Chief Motive Power** for the machinery at the World's Fair will be supplied by a gigantic engine, to be furnished free to the Exposition by the E. P. Allis Company, of Milwaukee. The engine will be furnished as a part of the company's exhibit. It will be of the quadruple expansion type, and will be of between 3,000 and 4,000 horse-power. Compared with this engine the big Corliss that was exhibited at the Centennial Exposition at Philadelphia, is almost a dwarf. In 1876 the Corliss was considered one of the wonders of the Exposition, but its builder rated it at only 1,400 horse-power, or less than half of the one being built by the Allis Company.

**The Tapestry Weavers.**

Let us take to our hearts a lesson—no lesson  
can braver be—

From the ways of the tapestry weavers on the  
other side of the sea.

Above their heads the pattern hangs; they  
study it with care;

The while their fingers deftly work, their eyes  
are fastened there.

They tell this curious thing, besides, of the  
patient, plodding weaver:

He works on the wrong side evermore, but  
works for the right side ever.

It's only when the weaving stops, and the web  
is loosened and turned,

That he sees his own handiwork—that his  
marvelous skill is learned.

Ah! the sight of its delicate beauty, how it  
pays him for all his cost;

No rarer, daintier work than his was ever  
done by frost.

Then the master bringeth him golden hire,  
and giveth him praise as well,

And how happy the heart of the weaver is, no  
tongue but his own can tell.

The years of man are the looms of God, let  
down from the place of the sun,

Wherein we are weaving away, till the  
mystic web is done—

Weaving blindly, but weaving surely, each  
for himself his fate.

We may not see how the right side looks;  
we can only weave and wait.

But looking over the pattern, no weaver need  
have fear,

Only let him look clear into heaven—the  
perfect pattern is there.

If he keeps the face of our Savior forever  
and always in sight,

His toil shall be sweeter than honey, his  
weaving is sure to be right.

And when his task is ended, and the web is  
turned and strown,

He shall hear the voice of the Master—it shall  
say unto him, "Well done!"

And the white-winged angels of heaven, to  
bear him thence, shall come down;

And God for his wages shall give him, not  
coin, but a golden crown.—Selected.

**Paste for Labels.**—The following is a recipe for a paste that will stick to anything:

Take three parts of sugar of lead, three parts of alum, five parts of gum arabic, and 16 parts of good wheat flour. Dissolve the gum arabic in two quarts of warm water; when cold stir in the wheat flour, and add the sugar of lead and alum, which must have been previously dissolved in water. Cook until it shows signs of ebullition. Let it cool, and it is ready for use.

**Queries and Replies.****Is Non-Granulation Proof of Adulteration**

QUERY 823.—If extracted-honey does not granulate, can it be considered a sure proof of adulteration in all cases? Canadian.

No.—DADANT & SON.

No.—C. C. MILLER.

No.—R. L. TAYLOR.

No.—G. L. TINKER.

Not in all cases.—J. P. H. BROWN.

No, not in all cases.—MRS. L. HARRISON.

No. Some honeys do not granulate.—G. M. DOOLITTLE.

No; some kinds of honey will persistently refuse to granulate.—C. H. DIBERN.

No. I have had pure extracted honey that would not granulate.—J. M. HAMBAUGH.

No; although it makes us suspicious, and it should be tested further.—P. H. ELWOOD.

No. I have some Alsike honey that is nearly three years old, and is not candied.—A. B. MASON.

No, not in every case. I have had some extracted honey that never granulated.—E. FRANCE.

I think not. I believe there may be some kinds of honey that do not granulate.—EUGENE SECON.

Some extracted honey granulates very slowly, and it is said, some not at all. I have never had any of the latter kind, however.—M. MAHIN.

By no means. I have had several specimens of very nice undoubted honey in our Museum for years, and it has never shown any signs of granulation.—A. J. COOK.

No. Some California honey does not granulate. There may be other varieties that do not. Pure honey may be heated so hot that it will not granulate again.—JAMES A. GREEN.

I should not like to say so, though granulation is considered a proof of purity. I know that nectar from some



sources will granulate much more readily than from others, and there may be plants producing nectar which will not granulate at all.—MRS. J. N. HEATER.

As a rule, yes. There may be exceptions, but I should look with suspicion upon such. Some honeys will granulate far more quickly than others, but granulation is a sure test of purity.—J. E. POND.

"No." I have had many cases where honey taken from the same extractor would granulate in a short time, and other bottles that remained as put up for one, and in some cases, three years.—H. D. CUTTING.

Oh, no. Honey from some sections of Texas hardly granulates at all, while honey gathered in northern parts of the State granulates very quickly. I think age enough might cause any pure honey to granulate. I suppose our Canadian friend means in a reasonable length of time.—MRS. JENNIE ATCHLEY.

Lots of pure honey refuses to granulate. The thicker and riper, the less likely to do so. Yes, that is so. I have had plenty of experience with tons of extracted honey. Then, again, honey mixed with cane sugar or glucose, will granulate. That is so, too, as strange as it may seem.—JAMES HEDDON.

No, sir. Honey as a rule candies or granulates, and this is good evidence of its purity; but I have seen pure good honey that would not granulate, or candy. I have a jar of honey ten years old that I took from the hive with my own hands, and it has never granulated. It is to-day, thick, pure of flavor, with no signs of granulation. I have seen plenty of samples of pure honey that will not granulate.—G. W. DEMAREE.

While the granulation of extracted honey is good proof of its purity, the lack of it is not positive proof of its impurity. Some kinds of honey, in particular localities, will not granulate, even if kept for many years.—EDITORS.

**Some** did not quite comprehend the notice of sale as published on page 727. Messrs. Thomas G. Newman & Son have not disposed of the Bee-Keepers' Supply Business or the *Home Journal*. Both will be continued as heretofore, at the same location as before, 199 East Randolph St., Chicago, Ills.

## Topics of Interest.

### "There is Nothing New Under the Sun."

REV. L. L. LANGSTROTH.

I send you an extract from an old and very rare book in my library. I copy it just as it is—spelling, capitals, etc.:

SAMUEL HARTLIB,  
HIS  
LEGACY  
OF  
HUSBANDRY,  
London, 1655.

"Some Physical uses of Milk, and of Curing the Black Jaundice, &c." Page 261.

"I thought to have imparted unto you the Secret how to preserve Milk from souring, but I must refer it to a person of singular Honor, Piety, and Experimental learning who has made some trial of it, but has not fully satisfied his mind about it.

As for Doctor Ziegler's Germane Book, written purposely on the subject of Milk, when I visited him at Zurich he shewed it me, not fair written for the Press. It will not be great, unless he resolved to add much of his own experience. For he tells mee, that, being miserably infected with the Black Jaundies in Prussia, and having been purged by the Physicians of that Country, with above 30 several sorts of purgations, even the most violent they could think of, he found himself never the better. Whereupon he resolved to take no more of their Counsel, but to try some conclusions of his own. And with the sole use of Milk he was perfectly cured. Besides he tells me that he hath several times, finding himself in some indisposition, prevented the returning of some hereditary diseases in himself, by abstaining from all manner of meat and drink, and living upon meer Milk, sometimes for fourteen days together. And I remember heretofore I have heard him say, that Milk is hurtful with other meats, but alone it is of unknown vertue."

I have requested that the above be given with the quaint spelling and capital letters used by Hartlib.

Now, if any are disposed to try this

milk diet, they may, especially if bee-keepers find much benefit from it. We know that milk is good for babes; and I can testify from my own experience that it is very good for the aged, who may not be very far off from "second childhood." Infants need to be fed frequently. Let me suggest that old people require the same, and many of them are great sufferers by adhering to the old rule of three meals a day, and nothing between these meals. If upon the milk diet, I would by no means recommend that it should all be taken in the hours of the regular meals, but at much more frequent intervals—in short, as often as the appetite craves it.

Let me give a leaf from my own experience, when I was so constantly handling bees. My dear wife once said to me, "How strangely your appetite for milk seems to vary! Sometimes you care nothing for it, while at other times you seem almost to live upon it; and often you drink a quart or more at a single meal." Having my attention thus called to the matter, a new and interesting train of thought occurred to me. I often remember hearing persons say, "Mother would never allow us to eat new honey unless we drank milk with it, because otherwise it gave us the colic."

Extending my inquiries, I became satisfied that milk is an antidote for bee-poison; for when I was not working with bees, I cared little or nothing for it; and it was only when my system was fairly saturated with bee-poison, that I had an almost insatiable craving for milk. I then began to study what eminent writers had to say about any connection between milk and honey, and found that, from the time of Hippocrates, who was born 460 years before the birth of Christ, down to modern times, successive testimony could be found as to the value of milk to prevent any injurious effects from eating honey.

Notice, now, how frequently the sacred Scriptures commend the Holy Land as a land flowing with *milk and honey*.

Notice, also, the curious association of milk with honey in "the Song of Songs, which is Solomon's"—Chap. 4:11: Thy lips, O my spouse, drop as the honey-comb; *honey and milk* are under thy tongue.

PERHAPS THERE IS SOMETHING NEW UNDER THE SUN.

The bridegroom, meaning to compliment his spouse, says, "honey and milk are under thy tongue;" which is the

same as saying, "Thou art a very sweet-mouthed woman!"

In conferring with Mrs. Kerr, my friend and next-door neighbor, she said to me, "My mother, who was a German, often made us eat *butter* with *honey*, because it prevented honey from giving us the colic. This immediately suggested to my mind a new train of thought. In Isaiah 7:15, it is written of the Holy Immanuel, "Butter and honey shall he eat," etc. Verse 22, "And it shall come to pass, that, for the abundance of milk, that they shall give, he shall eat butter; for *butter and honey* shall every one eat that is left in the land." See, also, Job 20:19: "He shall not see the brooks of honey and butter." Unquestionably, milk and honey, and butter and honey are, in the Bible, closely associated together.

In an article I wrote in 1870 for the AMERICAN BEE JOURNAL, I announced my discovery of the reason why honey so frequently disagrees with those who eat it. I showed that it was scarcely possible to take it from the bees, either in the comb, or in a liquid state, without more or less of the bee-poison being in it; that if any one said to me that he could not eat honey with impunity, I could assure him that, by bringing it nearly to the boiling-point, the bee-poison, which is very volatile, would escape, so that he could use it freely, while if a very little of this poison was put into any syrup which he had before used with impunity, it would affect him just as honey did. Unquestionably, the sacred writers who so often refer to milk and honey, and butter and honey knew that milk or butter added to the honey prevented the pain caused to so many persons from eating pure honey alone; and thus milk and butter were so frequently spoken of in the same connection.

Might not cheese, another product of milk, be also the right thing to use with honey?

Putting all these things together, it will be seen how naturally I was led to what, I think, is something new in exegesis, and gives a better understanding of some passages in the Word of God—"The good land!" "The land flowing with milk and honey!" Wherever milk is found in abundance, there, as a matter of course, will bees and honey also be found.

At some future time I may give my readers a new exegesis of some other passages of Scripture relating to bees.

Dayton, Ohio, June 6, 1892.



## Some Things Learned in Bee-Keeping.

O. W. WARNER.

When I commenced to take care of bees I bought a pattern hive; it had holes, and a screen over them, and as I had no experience with bees, I thought the holes were necessary, so the first hives I made were 10x11 inches, and 11 inches deep, with an alighting-board at the top in front of each box; so I used two boxes, which made a hive 22 inches deep. I bored a  $1\frac{1}{2}$  inch hole in the back of each box, on which I tacked wire screens.

I soon found that where there was a strong colony, they would seal up all cracks, and also would seal up the wire screen. The reason the weak colonies did not seal up the ventilator, was because there was not enough warmth to make their wax congeal. If you will examine you will find particles of wax that have dropped, whereas if there had been enough heat, the wax would have stuck.

I find that tin-pan and bell rattling is not necessary to settle swarming bees. Instead of making all the noise I could, though it was necessary to do something to keep the bees from running away, I do not make any noise, but let the bees settle. I never use water, unless there is a swarm that has come out unseen, and is found clustered, then I sprinkle them for fear the scouts will return before getting them hived.

The other day a swarm came out, and as they were alighting, another issued, and commenced to alight on the first swarm. I put a quilt around them, and the second swarm commenced to alight on a pear limb near the ground. Soon they commenced to alight on the ground. I got the hive, put it on the ground under the limb, shook the bees off the limb, and they went into the hive. When I went to move them to a stand, I saw a few bees running around, excited, on the ground. I locked, and there I found a dead virgin queen. I found a frame of comb with a queen-cell on it, and put it in, and they stayed, and are at work. What killed the queen?

I find the best hive for extracting is 14x14 inches, and 11 inches deep. The front and back are 16 inches, sides 14, and then a strip 16 inches long, and  $1\frac{1}{2}$  inches nailed at the bottom outside; the top strip 18 inches. Now let the top strip extend 2 inches in front, and take a strip 1x3 by 16 in. nailed in

front for an alighting-board. I use two boxes. I can put either box on top if I wish, and can take the boxes apart, and divide the bees, as the frames will fit either part.

Moab, Utah.

## Bee-Keeping in Colo., Iowa and Wisconsin

C. W. DAYTON.

Hearing much about Colorado as a bee and honey country, about the middle of April I sold my apiary in Wisconsin and came to work in an apiary this summer in contemplation of moving my Iowa apiary here by another season.

Having been here, now, a little more than a month, and as we are nearing the honey harvest, I can begin to look back over the records of the colonies and see how they compare with those of Iowa and Wisconsin.

First, Coloradans claim that they can winter the bees well out-of-doors, in single-walled hives. That is a fact. They nearly all do. But they are doing the same, too, in Iowa and Wisconsin, these easy winters. We have had so many easy winters lately, that they leave the colonies on the summer stands more and more. I remember in 1876, 1877, 1878, 1879, 1880, and 1881 they did just that way, too—let the bees remain on the summer stands. One bee-keeper had one colony left out of 137; another 3 out of 60; another 60 out of 170; another none out of 20, and so on. The next winter the bees all went into the cellar in hot haste; every last bee went into the cellar, or a big chaff hive.

Now it looks as if we were as liable as ever to experience a winter that is no joke to the bee-man, but a big joke for old Borealis to play.

It was described in one of the March numbers of the AMERICAN BEE JOURNAL how I winter my bees in a special repository where the temperature was at 62°. Those colonies were put out on April 16, and were apparently as populous as when put into winter quarters. Most of them crowded every space in 8-frame Langstroth hives.

The colonies which were wintered indoors were almost entirely without brood—not more than 3 square inches in any hive. Very few colonies wintered out-of-doors had a patch of brood half as large as my hand on April 15. That has been the condition of my colonies right along one winter after another in

Iowa and Wisconsin. Here I give a table showing the amount of brood in 25 colonies on the different dates in Colorado. That the amount of honey that is gathered is directly dependent upon the amount of brood the colonies have about 30 days before the harvest begins, is remembered.

No. of Colony on Register.	No. Frames Mar. 5.	Brood. May 27.	Kind of Hive for Winter.
104	2	4	Single Wall
105	1	4	Chaff
106	2	4	Single Wall
107	2	3	Single Wall
108	3	7	Chaff
109	3	4	Single Wall
110	2	5	Chaff
111	2	4	Chaff
112	3	4	Chaff
113	3	5	Single Wall
114	3	5	Chaff
115	2	3	Single Wall
116	2	4	Chaff
117	2	6	Chaff
118	3	5	Single Wall
119	3	4	Single Wall
120	4	5	Single Wall
121	3	4	Chaff
122	3	4	Single Wall
123	3	5	Single Wall
124	0	0	Single, dead
125	3	4	Chaff
126	3	4	Single Wall
127	2	3	Chaff
128	0	0	Single, dead

The table shows that the eleven colonies in chaff hives contain 50 combs of brood, and the 14 colonies in single-walled hives have the same number, indicating that the chaff hives are rather the best for winter and spring in Colorado. The live colonies average a little over 4 combs of brood each at this date. My old rule, and a rule I have followed out in Iowa and Wisconsin for years, is to have the colonies average from 6 to 7 combs of brood from May 20 to 25. Only one season in the last ten have they failed to average  $6\frac{1}{2}$  combs of brood on May 25, and that was pronounced a very late spring.

The honey harvest here opens on June 15 to 20, the same time as in Iowa, on the 43rd parallel; and those colonies which have 6 combs of brood on May 25, are able to take good advantage of it. If a colony has more brood than that, they were reduced to help weaker colonies; and if a colony had only 5 combs of brood on May 25, then the honey harvest was a few days ahead of them. What the outcome will be I cannot say, but, if the harvest comes on

time, the bees are from one to two combs of brood below what they should be.

In Colorado the honey is nearly all from alfalfa—a plant very much resembling clover, but larger in growth, and it is said to yield honey for about 40 to 60 days, white clover and basswood seldom last over 20 days. With so long a harvest even weak colonies should have time to build up to the best strength, and do good work for a month or more.

Basswood and clover often yield at the rate of 10 to 15 pounds of honey per colony per day. The harvest being so short, and there usually being several cloudy days during the harvest, prevented our getting a very large yield, and one year there were barely seven days, from spring until fall, when the bees laid up a surplus of honey. Still, in that short space of time my colonies harvested an average of nearly 70 pounds of extracted honey per colony. In order to do it the colonies had to be up and doing the first day the yield of honey came. Here, with this probable lengthy honey-flow, it seems to me that the yield per day must be rather light, or we would hear of some astonishing reports from this State.

Every one here says this has been an *unusually cold, stormy spring*. I have heard that (I was going to say) one thousand times: I have heard it so much that it has become a veritable "chestnut."

The best way to make the spring early is to make the bee-hives warmer, and give the bees some stimulating food. There is very little if any honey to gather here before the alfalfa blooms; also a great scarcity of pollen to encourage brood-rearing until cottonwood blooms. I saw the bees so eager to gather pollen about April 27, that they would pay little attention to honey, and would not rob. This never happens in Iowa or Wisconsin. There is not enough to assist in supporting the pollen theory, yet many colonies have diarrhea, as I have noticed.

What is most noticeable in springing bees in Colorado, is the large amount of brood all through March and April, and which does not increase very rapidly until May 15, or later. The cause of this is, that it is very warm when the sun shines, and very cold when it does not shine, and there are many sunshiny days all through the winter.

These warm days thoroughly arouse the bees like mid-summer, and starts them to breeding very early; then comes the cold nights and days that checks

brood-rearing; then the warmth again; so that the wear and tear on the old bees is so great that strong colonies on March 1, get weaker and weaker until sometime in May, when the warmth helps them to increase again.

But unlike Iowa and Wisconsin the old bees which go into winter quarters in the fall are entirely gone by May, if not in April, and the colony then consists of few newly-reared bees not worn by labor or age, and which may live to rear brood and help gather honey. When a colony consists of these young bees it becomes very tenacious to life, and in cases of weak colonies they may become very weak and still keep up their courage, and not dwindle away like the colonies of old bees do in Iowa. But the cold nights and cloudy days (which are always cold) seem to continue so late in the spring that the colonies do not have time to build up before the alfalfa is in bloom.

This continual breeding takes large amounts of stores—probably about 50 to 60 lbs. to last from one honey harvest to the next; and with all this consumption of stores and labor by the old bees, the colonies all through February, March, and April continue to get a little weaker, showing that it costs the life of more than one old bee, besides the honey consumed, to rear a young bee; and that if the old bees can be made to live until warm weather without rearing brood, it is by far the most economical plan.

In April the colonies are the smallest, and build up like weak colonies, but the vitality of the bees being of the very best, they are able to do considerably more than the same number of old bees would do in Iowa or Wisconsin.

When the colonies are put out in Iowa, and the weather warm, the hive being crowded with old bees, the queen will have 4 to 6 combs nearly full of eggs and brood in 10 to 20 days. When the old bees die it is by thousands; so when the brood begins to hatch that goes by thousands, and the places of the old bees are more than supplied at once.

Although Colorado is a very large State, good locations for apiaries are very scarce. Four-fifths of the country would not support bees at all, because alfalfa does not grow everywhere. It is not raised nearly as much as it might be, and never will, spread all over the State like clover in Iowa and Wisconsin. All crops depend upon irrigation with the snow-water that comes from the mountains, and which quantity can

supply only a limited amount of land situated near by; and it is only along these irrigation ditches in certain and favored spots where bees thrive; just about like the basswood ranges in Iowa; but it does not compare with the basswood of Wisconsin, nor the white clover of any of those States. The color and flavor of alfalfa honey is about the same as basswood, and Luzerne apiary took nine tons of it as last year's crop, one-half in the comb, with 30 or 40 per cent. increase of colonies.

Alfalfa is practically the *only* honey producer here, and this apiary, so far as I can learn, is the best equipped in the State. Over 100 of the new Heddon hives are in use, and its proprietor has purchased the exclusive right of that hive for Weld county.

The average per colony is about the same as in Iowa, as some who keep bees get very little honey in any season.

There is good prospects of sweet clover becoming, in time, a help to the bee-keeper, there being small patches of it started here and there.

One great drawback to the bee-business is the lack of market for the honey, and consequent heavy shipping expenses, which amounts to about 20 pounds per colony, and would bring the colony average of 80 pounds here, to the 60 pounds which I obtained in Wisconsin last year.

Greeley, Colo., June 3, 1892.

### Haldimand Bee-Keepers' Convention.

E. C. CAMPBELL.

The meeting of the Haldimand Bee-Keepers' Association was held at Nelles' Corners, Ont., on Saturday, May 28, 1892, with President Israel Overholt in the chair, and thirteen other members present.

Eighteen members reported 550 colonies, fall count; and 498, spring count.

On the question, "Does it pay to build up weak colonies by taking from strong ones?" there was considerable discussion. The members generally thought that it did not pay.

A general discussion then ensued on various subjects of interest to bee-keepers, and a profitable time was spent. It was decided to hold the next meeting at South Cayuga, Wismer's Corners, on Saturday, Aug. 27, 1892.

A committee was appointed to see after the government grant, and to arrange as to prize money to the shows



of Jarvis, Cayuga, Rainham and Dunnville.

A vote of thanks was tendered to Mr. Boyer, for the use of his hall, after which the meeting adjourned.

E. C. CAMPBELL, Sec.

## The Wintering of Bees.

C. E. MEAD.

A box-hive or log gum is a better hive to winter bees in than one with hanging frames with narrow end-bars, both to be single-walled. In a log or box hive, each comb acts as a division-board. In a frame hive the heat goes around the ends of the frames, and perhaps over the tops of them, compelling the bees to warm the whole hive in order to exist.

A tall hive is better than a shallow wide one. Almost all box and log hives are taller than their diameter. The heat is always above the bees. The combs do not shrink and break the capping, causing the honey to absorb moisture and sour, giving the bees the diarrhea.

Closed-end bars, five frames wide and two stories high, with a tight top, flat on the frames, would make the conditions about equal, provided there was a hole 3 inches below the top-bar, in each comb in the top story, in place of sticks. Some may say, "What, no Hill's device over the frames or cushion?" I use a  $\frac{3}{8}$ -inch board over the frames in winter, with two one-inch holes in it—one to feed salt and fresh water, and the other to feed syrup, if needed.

Box and log hives usually are better stocked with honey. My bees had from 30 to 50 pounds of honey last fall, in October, and would all have been dead a month ago if I had not fed them; 60 per cent. of them have nine Langstroth frames of brood, also drones, and have plenty of cups for queen-cells.

In 1866 I bought an old log hive—it was called by the farmer, "the old cannon." It certainly "fired off" a swarm and a box of honey, on an average, every year. It was about a 10-inch "bore" and 3 feet long. It was hung between two posts. A cow broke it down, and as it was about 20 years old, and most of the top knocked off, I got it cheap.

The bottom-board was gone as well, and between the combs at the bottom was filled with snow and frost. I poked it away with a stick. I found in transferring plenty of bees, brood, and in the

top about 15 pounds of honey, as hard as maple sugar is usually made in Vermont. The log I tore in bits with my hands. It was rotten. That was the strongest colony of 85.

I winter my bees in two ways, one is with two 10-frame hives, four division-boards, and on from 8 to 10 Langstroth frames. The lower hive is raised one inch; two division-boards, equal-distant from the sides, sawdust between the sides and division-boards, one-half of the frames (the lightest ones) between the division-boards. I put clay (strained so as to be free from sand and gravel) on the top of the bottom-board; place the top hive on, division-boards in the same proportion as the lower one, and fill the space between the division-boards with the solid frames of honey. I then cover the frames and division-boards with a  $\frac{3}{8}$ -inch board with two 1-inch holes in it, laid flat on the frames. Clay the top, and put on an empty super. Now fill the sides of the top hive and super with sawdust, put two  $\frac{1}{2}$ -inch sticks across the super, and put on the cover. Do this immediately after the honey harvest, leaving the entrance wide open.

Put me down for bottom ventilation, and plenty of it, and tight top. I never lost a colony packed as above. It is some work to do it.

I also use bottom entrance, like Manum's outside case, tight top, and one or two story 8 or 10 Langstroth frame hives.

### WINTERING NUCLEI.

I have wintered nuclei for several years successfully in this way:

Place a swarm strong in bees and honey on a Manum platform, entrance to the east. Cover the hive with a  $\frac{3}{8}$ -inch board; place the rim around  $\frac{3}{8}$ -inch higher than the hive, and room for 5 inches of packing. Now place the nucleus (with at least three solid frames, Langstroth size, of sealed honey or syrup) on top of the board, the entrance facing the south, and combs  $1\frac{1}{4}$  inches from the bottom-board. Extend the entrance outside of the rim, covered so as not to be clogged with packing.

I taper the entrance to the outside; it is then 2 inches wide,  $\frac{3}{8}$ -inch high, 6 inches wide at the hive, and 6 inches long. Make a small alighting-board. Raise the back end of nucleus hive one inch, and place a notched narrow rim over the entrance. Place a rim, or rims, so as to make them 6 inches higher than the nucleus. Put a  $\frac{3}{8}$ -inch board (with feed holes) over the

top of the nucleus. Now pack around and 6 inches above the nucleus, having ample ventilation at the top to keep the sawdust dry. Have at least one quart of bees in the nucleus. They are as warm as the big hive below, and breed up remarkably fast in the spring. See that they do not run short of stores. Do not stir them until steady warm weather, or until they need more room.

I have strong inclinations towards an unpainted, or white-washed hive, for wintering. The moisture dries out of it much quicker, making the wood a good non-conductor, something like a basswood log.

Chicago, Ills., June 3, 1892.

### Gathering Honey—Good Queens.

A. N. DRAPER.

On Saturday, June 4, I discovered that a large part of my bees were almost at the starvation point. I hustled up town, and before night I had a barrel of granulated sugar converted into syrup, and fed to them. In the afternoon I found that they had begun to work on white clover. Sunday the honey came in quite fast, and yesterday and to-day I have been getting surplus cases into place. The honey has been coming in very fast for the last three hours to-day, but the rain now (3 p.m.) has put a stop to it for the present.

My bees are in tip-top condition for the harvest, thanks to the "Miserable Frenchman," as Dr. Miller puts it. The colonies in big "Dadant hives" average the strongest in every way. If Dr. Miller will please explain how he gets just a little too much honey in an 8 frame Simplicity hive for a colony to winter on, he will confer a great favor—upon me at least. This spring, 11 frames of the size preferred by the Dadants have proved none too much. What bees I have in Simplicity hives I have given two stories, and both stories are pretty well filled with brood, in most of the hives. Of course, I have some weak colonies, but not nearly as many as commonly.

I reared a great number of queens a la Doollittle last summer, and I find that they average a better lot than any I have ever reared before. I give a good deal of credit for the fine condition of my apiaries at this date, to this extra fine lot of queens, and I am satisfied that I can, if any one can, compete with cheap sugar; that with large hives good

queens, and lots of good dry leaves around the hives. I shall try my hand at comb honey this summer, as I can sell it at good prices. Comb honey in sections must be our hope now. With the best granulated sugar at  $4\frac{1}{2}$  cents per pound by the barrel, where will extracted honey go?

The bottoms here will surely abound with Spanish-needle this fall—at least it looks now as though there ought to be water enough. There is also lots of young white clover coming up this spring. There will be a good honey crop from white clover next year, I think.

Upper Alton, Ills., June 7, 1892.

### Wabash Valley Bee-Keepers' Convention.

FRANK VAWTER.

The Wabash Valley Bee-Keepers' Association met in convention in the City Hall at Vincennes, Ind., on Saturday afternoon, May 28, 1892, with Vice-President Cox in the chair.

Several new members were added to the Association.

It was reported that arrangements had been made to give \$200 in cash premiums for bee and honey displays at the Knox county, Ind., Fair.

The Porter Spring bee-escape was exhibited, explained and approved.

The continued wet weather has had a bad effect on bees, as they cannot work in the rain. Many members reported loss of colonies by starvation during the month of May, which is something very unusual.

A specimen of a very pretty and new honey-plant was exhibited. It is known as "crimson clover," and is said to be a rich honey-producer. It is usually sowed in the fall.

A new disease there has made its appearance, which, for want of a better name, is called "bee-paralysis." The symptoms are a black and shiny appearance of the bees. They first act as though crazy, fall about, and soon die. The remedy is to transfer the colony to new combs, or give it a new queen.

It was explained that "5-banded" bees are not a new variety or strain, but simply a selection of Italians.

The next meeting will be held at the Mayor's office in Vincennes, at 10 o'clock on Aug. 17.

The membership of the Association should be greatly increased.

FRANK VAWTER, Sec.

**CONVENTION DIRECTORY.***Time and place of meeting.*

1892.  
 Aug. 17.—Wabash Valley, at Vincennes, Ind.  
 Frank Vawter, Sec., Vincennes, Ind.  
 Aug. 27.—Haldimand, at S. Cayuga, Ont.  
 E. C. Campbell, Sec., Cayuga, Ont.  
 Sept. 7, 8.—Nebraska, at Lincoln, Nebr.  
 L. D. Stilson, Sec., York, Nebr.  
 Oct. 7.—Utah, at Salt Lake City, Utah.  
 John C. Swaner, Sec., Salt Lake City, Utah.  
 1893.  
 Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.  
 Benj. E. Rice, Sec., Boscobel, Wis.

**[E]** In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

**North American Bee-Keepers' Association**  
 PRESIDENT—Eugene Secor, Forest City, Iowa.  
 SECRETARY—W. Z. Hutchinson, Flint, Mich.

**National Bee-Keepers' Union.**

PRESIDENT—James Heddon, Dowagiac, Mich.  
 SEC'Y AND MANAGER—T. G. Newman, Chicago.

**Bee and Honey Gossip.**

**[E]** Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

**Hurrah for the Swarms!**

Warm weather comes in with June, and "hurrah" for the swarms! Hives all ready! Chuck 'em in! Big swarms, too. Hip, hip, hee! isn't it fun? I think that in spite of the old saying, "a swarm of bees in June is worth a silver spoon," it will be worth a dozen silver spoons this year, as white clover is just coming to full bloom; it is a little "behind," just the same as the bees.

EDW. E. SMITH.

Carpenter, Ills., June 6, 1892.

**White Clover Promises Well.**

We have had a very backward spring in this locality. March and April were cold and wet, and the bees gathered only enough honey for brood-rearing. May has been wet, so the bees could not gather much honey. They have not swarmed much in this locality. I have had one swarm out of 16 colonies. The hives are overflowing with bees. White

clover promises well. I have not seen bees work on white clover as heavy as at the present time. We have had favorable weather for nearly two weeks, and if the weather continues favorable through June, we may get some surplus yet, as the bees have commenced in the surplus sections. In this locality the spring honey season lasts until July 1, then the bees do not gather any honey until the fall flowers commence to bloom, and that is the first or middle of August. The past years have been very favorable for fall honey for winter stores, and if this fall is similar, the bee-keepers surely ought not to be discouraged if they do not get much surplus honey this season, or just so the bees have enough for winter. I want to plant some linden trees this fall. Will some one tell me where I can get them?

CHAS. GUTH.

Santa Claus, Ind., June 5, 1892.

**Making Use of Brood-Combs.**

What is the best plan to make use of a lot of nice brood-combs? I wish to work my bees for comb honey, allowing each colony to swarm once. The time for swarming here is from June 15 to July 15. We may reasonably expect a fall flow of honey, if the season is not too dry.

SUBSCRIBER.

Brownville, Iowa, May 30, 1892.

[Give them to swarms, in place of empty hives. They will be thoroughly appreciated in that instance.—EDS.]

**Bee-Keeping in Tennessee, Etc.**

This has been the worst spring for bees for 30 years. It rains about every day, and it has been so cold for the last month that half the time a man had to wear a coat all day. It rained all the time that the poplar was in bloom, so bees got but little benefit of the bloom. White clover is in abundance here, but the bees cannot get out to gather any honey, on account of the cold wind and cloudy weather. I have 21 colonies, and they have not stored any surplus honey yet. Last year, at this time, I was selling honey, and now I have none for myself to eat; but it is not the bees' fault. My bees have not swarmed any this spring; they are not even strong enough for dividing. I put on some one-pound sections, and if the weather does not get warm and dry in a few days, they will be taken off empty. Provided



that June is not warm and dry, our honey harvest will end the last of June, until September and October. I lost one queen in the winter, but the colony survived until spring; I then gave them some bees and a queen, and they are doing very well, considering the weather. I had another colony that the queen came out; she could not fly, and acted as if she was crippled. I put her back on the comb, and in a few months she was out again. I examined the comb, and found young larvæ, but no eggs. The queen was two years old this summer, so I killed her, and gave the colony two frames of brood and eggs. Now they have as fine a young queen as ever I saw. What was the cause of the queen leaving the hive? Was it for the want of something? Will Mr. Doolittle please answer?

A. C. BABB.

Greenville, Tenn., May 30, 1892.

#### Bees Wintered Well.

The bees in this locality have wintered well, with only a very small per cent. of loss. The weather has been unfavorable on account of the rains during the month of May. The locust trees are now in full bloom, and are humming with the busy bee from early morn until late at night. The white clover is just beginning to bloom, which is the main supply of the honey crop in this section. There is no pleasant weather to spare now. Every one should be ready for the honey crop, having the hives full of bees, and the sections ready for the surplus, all in "apple-ple order," so as not to lose one moment of time, as "time and tide wait for no man."

W. S. STEVENS.

Mechanicstown, O., June 6, 1892.

#### Ants in the Hives.

I have several colonies of bees that have a good many little red ants in them. How can I get them out, and keep them out? Please answer in the BEE JOURNAL.

B. CHENEY.

Brandon, Wis.

[In Prof. Cook's "Manual of the Apiary," we find the following directions for getting rid of ants:—EDS.]

"You can very readily brush them away, or destroy them by use of any of the fly poisons which are kept in the markets. As these poisons are made attractive by adding sweets, we must be

careful to preclude the bees from gaining access to them. As we should use them in the spring, and as we then need to keep the quilt or honey-board close above the bees, and as the ants cluster above the brood-chamber, it is not difficult to practice poisoning.

One year I tried Paris green with success. There are several reports of ants entering the hives and killing the bees; even the queen is said to have been thus destroyed. In such cases, if they occur, it is best to put a sweet poisonous mixture in a box and permit the ants to enter through an opening too small to admit bees, and thus poison the ants. Or we may find the ant's nest, and with a crowbar, make a hole in it, turn in this an ounce of bisulphide of carbon, and quickly plug it up by packing clay in the hole and on the nest. The liquid will kill the ants. This better be done when the ants are mostly in their nest."

#### Hard Time for the Bees.

The past two months have been a hard time for bees in this locality, it being cold and wet nearly all the time. I have 110 of the 114 colonies which I packed last fall, but they are not in very good condition to gather a large crop of clover honey.

A. W. SMITH.

Parksville, N. Y., June 3, 1892.

#### Chaff Hives for Wintering Bees.

I am an old bee-keeper. I have now only 13 colonies of bees, having lost quite a number in winter, but mostly this spring, though I have been tolerably successful in the wintering of bees. Of late years I have wintered them in a stone milk-house, partly under ground, and having double doors. I placed the hives in this repository, raised a little above the bottom-board, and took off the top of the hives clear to the frames, then I put on about two feet of straw. Last winter I wintered two colonies in chaff hives out-doors, and I am so well pleased with that plan that I shall continue to winter all my bees out-doors in chaff hives. I have investigated this subject somewhat, and know of others who are having the best results by wintering bees in chaff hives. The 2 colo-

nies thus wintered are far ahead of those wintered in the cellar. The combs came out in the spring dry and free from mildew, and the bees were active and healthy, with no great lot of dead bees, as is usually the case when wintered in the cellar. Last winter was a mild one, and it may be thought that that had something to do with the wintering of my bees; but I know a man in Chickasaw county, Iowa, who has wintered bees in chaff hives for years, and has always been very successful in thus wintering them. My chaff hives are made of common ship-lap lumber, covered with flooring; they take the Langstroth frame, and are high enough to enclose a super.

BAFAYETTE NORRIS.

Aurora, Iowa, June 2, 1892.

#### The Use of Bee-Escapes.

In this day and age when there are so many persons that are trying to get up something new in the line of bee-supplies, we very often are beaten by paying money for some useless thing, that someone patented; but we must be very careful and not buy before we investigate. I believe that a person who uses his brains, and gets up a really good article, ought to have the benefit of it. There has been considerable in the bee-papers of late about bee-escapes, and our attention has often been called to them. I used three different kinds of bee-escapes last season, and found that two of them did the work satisfactorily, viz: the Hastings and the Porter. The Hastings bee-escape will clean a case of sections in from 2 to 4 hours, leaving the case so quietly and quickly that it is nothing but fun to clean an apiary of its surplus comb honey. No bee-keeper ought to be without a good bee-escape, and I think after using it once, he will continue to do so.

W. E. CLARK.

Oriskany, N. Y.

#### Making Swarm-Catchers.

In years past the sentiment generally expressed was unduly opposed to patent rights among apiarists, but within the past year I have noticed patents have been granted on hives and other fixtures which have been in general use for years. I notice in a recent number of the AMERICAN BEE JOURNAL a patent has been granted on a swarm-catcher which I have had in use in my apiary for the

past two years, and which was fully described by Robert Carver, on page 403 of the BEE JOURNAL for 1890. He there says that he had 20 in use in his apiary at that time. If I were going to make them, I would be glad to do it for \$2.00 apiece. About the way they are made, and the cost, are as follows: Get some wire-cloth 36 inches wide, cut it diagonally, and you have the two side pieces. Then get another piece 28 inches wide, cut it in two in the middle, and you have two tops. We get the cloth here in the country town at 15 cents a yard. The cost of netting for each catcher would be about 25 cents; lumber not over 20 or 25 cents, leaving \$1.50 for a few nails, paint, and about 2½ hours' work by hand.

HENRY DURHAM.

Sylvania, Ind., June 6, 1892.

#### Prospect of an Immense Crop.

It has been very backward and wet here this spring, having rained almost every day for a good while. We have had now two days without rain, and the bees are making good use of the good weather. I have not been around over the country very much, but where I have been there is a prospect of an immense crop of white clover. It is now beginning to bloom, also raspberries and blackberries, and I think that the bees will get along all right now. I started in the winter with 10 colonies of bees, and got through with 7. One colony came out on May 29, and went into another hive. They had no honey, and but very little brood.

H. T. LATHROP.

Willard, Iowa, June 6, 1892.

#### Stealing Eggs to Rear Queens.

Mr. Geo. E. Fellows mentions this subject on page 741. I have also seen the subject discussed before. The probability is that Mr. F. had some queens in his yard that were prolific layers, to that extent that several eggs were laid in some cells. Of course, all but one would be removed by the bees, and it might be possible that some over-nice house-keeper (or rather hive-keeper) when carrying them from the hive, dropped some at the entrance of the hive containing the queenless colony. This being the case, it would be nothing strange that they should be taken to rear a queen, no more than they should be taken from a cell in the ordinary way.

Several years ago I wrote an article on this subject, which never appeared in print. Probably the editor, to whom I sent my article, supposed my theory was foolish. Possibly at some time in the future it may be accepted as facts.

Lockwood, N. Y. J. H. ANDRE.

#### Space Under Brood-Frames.

It is a cold, backward spring, and colonies are weak in bees. I have 13 colonies, and have lost none yet. What is the best size of space under brood-frames for both summer and winter, with fixed bottom-boards, and wintered on the summer stands in chaff hives? I notice that some bee-keepers recommend a space up to  $\frac{1}{4}$  of an inch. Mine are  $\frac{1}{2}$  inch, with an entrance  $\frac{3}{8}$  to  $\frac{1}{2}$  inch, and 12 inches long.

GEO. A. COBB.

Windham, N. Y., June 4, 1892,

[It is not of much importance unless a space of more than  $\frac{1}{4}$  of an inch is given, and we prefer that size rather than anything smaller.—Eds.]

## Wavelets of News.

#### Sunflowers—History and Value.

It has been suggested that while we are sending Indian corn to Russia, and trying to teach the poor peasants of that country how to eat it, we should learn something from them in regard to the great value and usefulness of the sunflower. It is said that in the Czar's dominions 750,000 acres are devoted to the cultivation of the sunflower, and that every part of the plant is utilized.

From the seed an oil is expressed that is used in cooking, for salads and various domestic purposes, as olive oil is in other countries. The oil-cake is valuable for feeding cattle, and the dry stalks make an excellent fuel. The seeds of the larger varieties are used to an enormous extent by the people, very much as peanuts are eaten with us, but without being roasted. They are certainly excellent in flavor, as well as rich and nutritious.

But the strangest part of this story of the sunflower is that probably many centuries, if not thousands of years before Columbus sailed in his voyage of discovery, the inhabitants of this coun-

try were cultivating, or, at least utilizing the seed of this plant for food, and its flowers as sacred emblems in their religious rites.

The early inhabitants of America who worshiped the sun, used the sunflower in their religious ceremonies on account of its resemblance to the great source of light and heat. Historians who have investigated the subject inform us that the virgins who officiated in the Temples of the Sun in Peru, were crowned with sunflowers made of pure gold, and also carried them in their hands, besides wearing them on their breasts.

Historically it is the oldest plant of which we have any record, and this record extends back in America to a very early period, of which we know nothing except what we can learn from the imperishable relics of their handiwork scattered broadcast over the entire Western Hemisphere.—ANDREW S. FULLER, in *N. Y. Tribune*.

#### Dwindling of Colonies.

Spring dwindling is one of the dangers that beset bee-keeping, and imperil colonies. Dwindling occurs to some extent during spring, summer, fall, and winter. Dwindling occurs by reason of certain different causes, the most common one the failure of colonies to rear brood to the extent required to maintain an equal populous condition of the colony by reasons (often) of queens failing to supply sufficient eggs in due season, and perhaps workers sometimes mismanage breeding affairs; besides, the contingencies of unfavorable weather, chilly temperature, and undue careless exposure while the weather is fickle in changes of temperature. Colonies in a normal condition will reproduce more than equal to ordinary losses of old or imago bees, providing, however, brood-rearing goes along, as it naturally should.

Unless colonies are blessed with first-class queens, spring dwindling will be mooted and whooped up in all the bee-periodicals. Success in bee-keeping very largely depends on the prolificness of queens used. No such bee-hive as a "non-swarmers" ever was or can be contrived, but non-swarmer queens are very common; yes, they have been advertised by certain breeders. It is a law of nature that all colonies of bees that remain in a primevous or prime condition will multiply individually, and multiply in colonies by swarming. The mandate is, "multiply and replenish." —C. J. ROBINSON, in *American Farmer*.





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**GEORGE W. YORK & CO.,**

199 Randolph St., CHICAGO, ILLS.

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**The Date** on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year.

**The Premiums** which we give for securing new subscribers to the AMERICAN BEE JOURNAL, are intended as pay for work done in getting new names among your friends and acquaintances, and are not offered to those who send in their own names as new subscribers, unless such name or names form a part of a club of at least three subscribers.

**The Convention Hand-Book** is very convenient at Bee-Conventions. It contains a Manual of Parliamentary Law and Rules of Order for Local Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with subjects for discussion, and about 50 blank pages, to make notes upon. It is bound in cloth, and of the right size for the pocket. We will present a copy for one new subscriber to the BEE JOURNAL, with \$1.00.

**An Apiary Register** is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for \$1.00, post-paid; for 100 colonies, for \$1.25; or for 200 colonies, for \$1.50. After using it for one season, you would not do without it.

**Bee-Keeping for Profit**, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with \$1.

**A Binder** for preserving the copies of the AMERICAN BEE JOURNAL as it arrives from week to week, is very convenient. You should have one, as it is so handy for reference from time to time. We mail it for only 50 cents, or will give it as a premium for two new subscribers, with \$2.00.

**When Talking About Bees** to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

## CLUBBING LIST.

**We Club** the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

	Price of both.	Club.
The <i>American Bee Journal</i> .....	\$1 00....	
and Gleanings in Bee-Culture.....	2 00....	1 75
Bee-Keepers' Guide.....	1 50....	1 40
Bee-Keepers' Review.....	2 00....	1 75
The Apiculturist.....	1 75....	1 65
Canadian Bee Journal.....	2 00....	1 75
American Bee-Keeper.....	1 50....	1 40
Nebraska Bee-Keeper.....	1 50....	1 35
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**Almost Every Bee-Book** that is now published we mention on the second page of this issue of the *BEE JOURNAL*. Look over the list and select what you want. For every new yearly subscriber that you secure for us at \$1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apian knowledge among our friends.

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**Please Send Us** the Names of your neighbors who keep bees, and we will send them sample copies of the *BEE JOURNAL*. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

**When You Have** any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

## Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

**WANTED**—Everybody to send for sample of the Thinnest and Best Surplus Foundation made—14 to 16 square feet to the lb.  
24A4t W. H. NORTON, Skowhegan, Me.

**WANTED**—Everybody to send me 10 cents in exchange for my little book, "The A B C of Ferret Culture." It tells all about the care and management of this little animal.  
25Atf N. A. KNAPP, Rochester, Lorain Co., O.

**FOR SALE**—36 Improved L. Hives complete nailed and painted, \$1 each; 2000 Sections, \$5.50. Large sample pkg. Alsike clover seed, 10c.; lb. 30c., prepaid. Large sample pkg. New Japanese Buckwheat, 5c.; lb. 20c., prepaid; per bu. \$1.20.; sacks free. Warranted Italian Queens, \$1.50. L. J. CLARK, Wiscoy, Minn.  
24A2t

**WANTED TO EXCHANGE**—My new price-list of Italian Bees, White and Brown Leghorn Chickens, White and Brown Ferrets, and Scotch Collie Pups—for your name and address on a postal card. N. A. KNAPP,  
25Atf Rochester, Lorain Co., Ohio.

**HONEY AND BEESWAX MARKET.**

CHICAGO, June 11.—Fancy comb honey is selling at 16c.; choice, 14@15c. Other grades 10@13c. Extracted, scarce, good demand, at 7@7½c. Beeswax, active sale, 28c.  
S. T. FISH & CO., 189 S. Water St.

NEW YORK, June 11.—No demand for comb honey excepting fancy white. Quite a stock on the market of off grades and buckwheat. New Southern extracted arriving and sells at from 70@75c. per gallon for choice; 65@70c. for common. Beeswax quiet but firm at 27@29  
HILDRETH BROS. & SEGELKEN,  
28-30 West Broadway.

KANSAS CITY, Mo., June 11.—Demand light, supply ample. White comb, 10@12c.; amber, 8@10c. Extracted, white, 6¼@7c.; dark, 5@6c. Beeswax—Demand good, supply light; price, 22@26c. It looks as if old crop of comb will not be all sold before new crop is ready.

CLEMONS, MASON & CO.,  
Cor. 4th and Walnut Sts.

CINCINNATI, June 11.—Demand is good for extracted, slow for comb. Supply good of all kinds, Comb, 11@14c. Extracted, 5@8c. Beeswax is in fair demand, at 25@27c. for good to choice yellow. Supply good.

C. F. MUTH & SON,  
Cor. Freeman & Central Aves.

NEW YORK, June 11.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c. per gal.; Calif., 6¼@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c. more per lb. for extra select.  
CHAS. ISRAEL & BROS., 110 Hudson St.

KANSAS CITY, Mo., June 11.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.  
HAMBLIN & BEARSS, 514 Walnut St.

DETROIT, June 11.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.

M. H. HUNT, Bell Branch, Mich.

CHICAGO, June 11.—Very little choice comb on market; demand equals supply; sells at 13@15c.; dark, 10@12c. Extracted, very scarce; good demand; white sells at 7@8c., dark, 6@7c. Beeswax is plentiful, fair demand, 25@26c.  
J. A. LAMON, 44-46 S. Water St.

MILWAUKEE, June 11.—Demand very moderate, supply average of all grades but common quality. Best 1-lb., 15@16c.; common, 12@13c. Extracted, white, in barrels, 7c.; in kegs, 7½c.; in pails, 7¼@8c. Beeswax—demand fair, supply small. Price, 23@28c.  
A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO, June 11.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5¼@6 cts. Comb, 1-lb., 10@11c.; 2-lb., 6@8c. Beeswax—24@25c.

SCHACHT, LEMCKE & STEINER,  
16 Drumm Street.

NEW YORK, June 11.—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c.; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6¼@7c.; buckwheat in demand at 5@6c. Beeswax in fair demand at 26@28c.

F. I. SAGE & SON, 183 Reade St.

CHICAGO, June 11.—Selling slowly, trade being in strawberries and other small fruit. No fine comb honey on the market—it would bring 15@16c. Extracted, 6, 7 and 8c., according to quality and kind. Beeswax, 27c.

R. A. BURNETT, 161 S. Water St.

BOSTON, June 11.—Demand is light. White 1-lb., 13@15c. No 2-lb. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.

BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, MINN., June 11.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.

STEWART & ELLIOTT.

ALBANY, N. Y., June 11.—Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.

H. R. WRIGHT, 326-328 Broadway.

NEW YORK, June 11.—Demand moderate, and supply reduced, with no more glassed 1-lb. nor paper cartons, 1-lb. We quote: Comb, 1-lb., 14@15c. Extracted—Basswood, 7¼@7½c.; buckwheat, 5¼@6¼; Mangrove, 68@75c. per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.

F. G. STROHMEYER & CO., 120 Pearl St.

**Winter Problem in Bee-Keeping;** by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

**We Club the AMERICAN BEE JOURNAL** and the monthly "Illustrated Home Journal" one year for \$1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for \$2.10.

**The Honey-Bee; giving Its Natural History, Anatomy and Physiology.** By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. \$1.00. For sale at this office.

**The Amateur Bee-Keeper**, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

**The Busy Bees, and How to Manage Them**, by W. S. Ponder. Price 10 cents. For sale at this office.